September 5, 2000

4APT-ARB

Howard L. Rhodes, Director
Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: EPA's Review of Proposed Title V Permit No. 0570039-002-AV
Tampa Electric Company - Big Bend Station

Dear Mr. Rhodes:

The purpose of this letter is to notify the Florida Department of Environmental Protection (FDEP) that the U.S. Environmental Protection Agency (EPA) formally objects to the issuance of the above referenced proposed title V operating permit for the Tampa Electric Company - Big Bend Station, located in Hillsborough County, Florida, which was received by EPA, via e-mail notification and FDEP's web site, on July 25, 2000. This letter also provides our general comments on the proposed permit.

Based on EPA's review of the proposed permit and the supporting information received for this facility, EPA objects, under the authority of Section 505(b) of the Clean Air Act ("the Act") and 40 C.F.R. § 70.8(c) (see also Florida Regulation 62-213.450), to the issuance of the proposed title V permit for this facility. The basis for EPA's objection is that the permit incorrectly identifies several requirements as "not Federally enforceable," does not fully meet the periodic monitoring requirements of 40 C.F.R. § 70.6(a)(3)(i), does not contain conditions that assure compliance with all applicable requirements, as required by 40 C.F.R. § 70.6(a), and contains Acid Rain requirements that do not adequately implement the Acid Rain regulations applicable to this facility. Pursuant to 40 C.F.R. § 70.8(c), this letter and its enclosure contain a detailed explanation of the objection issues and the changes necessary to make the permit consistent with the requirements of 40 C.F.R. Part 70 and assure compliance with applicable requirements of the Clean Air Act. The enclosure also contains general comments applicable to the permit.

Section 70.8(c) requires EPA to object to the issuance of a proposed permit in writing within 45 days of receipt of the proposed permit (and all necessary supporting information) if EPA determines that the permit is not in compliance with the applicable requirements under the Act or the requirements of 40 C.F.R. Part 70. Section 70.8(c)(4) of the title V regulations and

Section 505(c) of the Act further provide that if the State fails to revise and resubmit a proposed permit within 90 days to satisfy the objection, the authority to issue or deny the permit passes to EPA, and EPA will act accordingly. Because the objection issues must be fully addressed within the 90 days, we suggest that the revised permit be submitted in advance in order that any outstanding issues may be resolved prior to the expiration of the 90-day period.

If you have any questions or wish to discuss this further, please contact Mr. Gregg Worley, Chief of the Operating Source Section, at (404) 562-9141. Should your staff need additional information, they may contact Ms. Gracy R. Danois, Florida Title V Contact, at (404) 562-9119 or Ms. Lynda Crum, Associate Regional Counsel, at (404) 562-9524.

Sincerely,

/s/ James S. Kutzman for
Winston A. Smith
Director
Air, Pesticides and Toxics
Management Division

Enclosure

cc: Mr. Stanley J. Martin, TEC- Big Bend
Mr. Scott Sheplak, P.E., FDEP (via e-mail)

Enclosure

U.S. EPA Region 4 Objection
Proposed Part 70 Operating Permit
Tampa Electric Company
Big Bend Station
Permit no. 0570039-002-AV

I EPA Objection Issues

1. Federally Enforceable Requirements: Section II, conditions 7, 8, 12 and 13 are identified as "not Federally enforceable." Conditions 7 and 8 are Federally enforceable because they are contained in the Federally approved portion of the Florida SIP. Conditions 12 and 13 address the requirement to provide compliance notifications and notification of potential permit modifications to the Environmental Protection Commission of Hillsborough County (EPCHC) and EPA, and provide the appropriate mailing addresses. Pursuant to 40 C.F.R. §70.6(c)(5)(iv), compliance certifications shall be submitted to the Administrator as well as to the permitting authority. Therefore, these conditions are also Federally enforceable since they are part of the required elements of a title V permit.

   Section III, conditions A.15, A.20, A.31 are also identified as "not Federally enforceable." Condition A.15 specifies that compliance testing for particulate matter and visible emissions may be conducted either with or without fly ash reinjection. A source is required to conduct compliance testing at conditions that are representative of the day to day operation to better assess the compliance status of the facility. Therefore, this requirement is Federally enforceable and must be identified as such in the permit. Condition A.20 appears to be based on the requirements of 40 C.F.R. 60.46a(g), a Federal requirement. Condition A.31 requires the submission of quarterly reports to the Department and EPCHC detailing the 30-day NO_x rolling average, all time periods of boiler operation as well as a statement of CEM and/or boiler malfunction, start-up or shutdown. As noted above, this requirement appears to fall within the scope of the requirements of 40 C.F.R §70.6(c), thus making it Federally enforceable.

2. Appropriate Averaging Times: The emission limits for particulate matter in conditions A.7 and B.5, and for carbon monoxide in condition B.10 do not contain averaging times. Because the stringency of emission limits is a function of both magnitude and averaging time, appropriate averaging times must be added to the permit in order for the limits to be practicably enforceable. An approach that may be used to address this deficiency is to include a general condition in the permit stating that the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance.

Per special condition 2 of permit AO29-219924, the averaging time for the particulate matter emission limit in condition A.7 of the proposed title V permit for TEC - Big Bend should be two hours. Since the facility already uses this averaging time to evaluate compliance with the particulate matter limit for this unit, the Department should include the same averaging time in the title V permit.

3. Federal Enforceability: Condition B.53 states the following:

> *"Compliance with standards in 40 C.F.R. 60, other than opacity standards, shall be determined **only** by performance tests established by 40 C.F.R. 60.8, unless specified in the applicable standard."*

The language for this condition was taken from 40 C.F.R. 60.11(a), however, the words "in accordance with" were replaced with "only by." Since adding the word "only" precludes the use of credible evidence for determining compliance, this condition is not federally enforceable. Therefore, this condition must be changed so that it is consistent with 40 C.F.R. 60.11(a).

4. Reporting Requirements: Condition C.10 specifies that reporting requirements for PM, sulfur dioxide, VOC, etc., apply if the turbines emit pollutants at the specified level. However, the permit and the statement of basis are silent as to how the facility will evaluate its emissions from the turbines. The permit must specify how the facility will evaluate whether these reporting requirements apply.

5. Periodic Monitoring: As outlined below, the proposed title V permit for TEC - Big Bend does not contain adequate periodic monitoring requirements to assure compliance with all emissions and operational limits contained in the permit. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to demonstrating compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, periodic monitoring requirements sufficient to assure compliance with all permit limits must be incorporated in the permit or a technical demonstration must be included in the statement of basis explaining the rationale for the approach used by the Department to address periodic monitoring requirements for these units.

   a. Subsection D: Condition D.1 specifies the maximum loading rate for the fly ash silos no. 1 and 2. For other units included in this permit, there is a

permitting note clarifying that these conditions are not included as limits, but as a basis for determining the percent capacity of the units during source testing (see A.1, and B.1). Periodic monitoring requirements sufficient to assure compliance with the capacity limitations in condition D.1 must be included in the permit or clarifying language needs to be added to this condition.

b. Subsections E and F: The permit does not contain periodic monitoring for the particulate matter and visible emissions limits contained in subsections E and F of the proposed permit, which address the requirements for the Flyash Silo no. 3 and the Limestone Handling and Storage. The permit must include the appropriate test methods that the facility will use to determine compliance with the emission limits and the frequency for testing. Also, conditions E.3 and F.4 require that the systems be operated under negative pressure and that they vent to the control system but there are no requirements to monitor the system pressure or the frequency for assessing whether the system is operating under the specified conditions. Appropriate periodic monitoring requirements must be included in the permit or the statement of basis must explain why no testing is needed for these units.

c. Subsection G: Condition G.2 limits the hours of operation for the coal bunkers, therefore, the permit must include a requirement to record hours of operation. Condition G.5 states that the facility shall determine compliance with the visible emissions limit using Method 9, however, the condition does not establish the frequency for testing. The appropriate testing frequency must be included in the permit.

e. Subsection H: Condition H.2 of the proposed permit specifies that the facility will conduct visible emissions testing for the solid fuel yard within 90 days of completing the reconfiguration of the fuel yard. Periodic monitoring requirements sufficient to assess compliance with the VE limit for the solid fuel yard must be included in the permit.

f. Subsection J: Condition J.4 does not establish the frequency of testing for visible emission for the Abrasive Blast Booth and Abrasive Blast Media Storage. The appropriate testing frequency must be included in the permit. Also, since these units have baghouses, periodic monitoring requirements should be added to assess the proper operation of the control equipment.

6. Practical Enforceability: Conditions M.2 and M.6 leave to the facility's discretion how to evaluate what constitutes proper operation of the baghouse without providing any criteria to make such determination. As written, these conditions

are not enforceable as a practical matter. The conditions must contain sufficient detail to ensure that the facility clearly understands what its obligations are and how compliance with these requirements will be evaluated. Also, since this unit has a baghouse, the Department should consider adding periodic monitoring requirements to assess the proper operation of the unit.

7. Applicable Requirements: The Department must ensure that the conditions from the Consent Decree that are effective during the life of the permit for TEC - Big Bend is appropriately addressed in the permit. Although the Consent Decree can be included as an attachment to the permit, we found at least one instance where a permit condition conflicts with the stipulations of the Consent Decree. Paragraph 30 of the order requires the company to operate the existing scrubbers for units 1 and 2 at all times, effective September 1, 2000, however, condition A.9 of the permit allows for the intermittent operation of the scrubber to control SO_2 emissions. Please note that the terms of the Consent Decree take precedence over any existing construction permit terms. The permit must be revised to incorporate the appropriate scrubber operating conditions.

   Further, the facility will benefit from having all the relevant requirements included in one document. For example, the permit should include the requirements of Paragraph 42 of the order, which stipulate that the company must apply for a title V permit or an amendment to an existing title V permit to incorporate the changes to the facility resulting from the consent decree. This requirement will be triggered by the requirement in paragraph 32 to install a CEM for PM on or before March 1, 2002. We strongly recommend the Department to consider including the stipulations of the Consent Decree in the proposed title V permit for TEC- Big Bend.

8. Acid Rain Requirements: The following items form Section IV, Phase II Acid Rain Part, must be corrected in order to make the requirements consistent with the Acid Rain regulations applicable to this facility:

   a. Phase II of the Acid Rain Program began on January 1, 2000, which is the date by which initial Phase II permits for existing phase II units are to be effective (see: 40 CFR 72.73(b)(2), "State Issuance of Phase II Permits"). However, the effective date proposed for the title V permit containing the Phase II Acid Rain Part for the Big Bend Station is January 1, 2001. The permit needs to clarify that the effective period for the Phase II Acid Rain Part is five years beginning January 1, 2000.

   b. Section IV, Phase II Acid Rain Part, indicates that the Acid Rain, Phase II SO_2 allowance allocations for the Big Bend units BB01, BB02, BB03, BB04 are for the years 2001 through 2005. The SO_2 requirements under the Acid Rain

Program are effective beginning January 1, 2000, therefore, the permit needs to be revised to include the allowance allocations for these units for the year 2000.

c. Section IV, Phase II Acid Rain Part, contains the Phase II NO_x limitations for the years 2001 through 2004 for the Big Bend units BB01, BB02, BB03, BB04. The Phase II NO_x Averaging Plan that was submitted by the source (signed December 20, 1999) indicates that the plan is to be effective for the years 2000 through 2004. The permit needs to be revised to include NO_x limits for the year 2000. In addition, since the proposed expiration date of the Title V permit is December 31, 2005, the permit will need to be revised to include Phase II NO_x emission limits for the year 2005. The permits will also need to contain a Phase II NO_x Compliance Plan submitted by the source indicating how the source plans to comply with the Phase II NO_x emission limits for the year 2005.

d. The NO_x limit for units BB01, BB02, BB03, BB04 in the Phase II Acid Rain Part indicates that, in addition to the specified alternative contemporaneous emission limit, the units shall not have an annual heat input greater than a specified value (mmBtu). This language must be changed to indicate that these units shall not have a heat input "less than" a specified value (mmBtu) in order to be consistent with 40 CFR 76.11(a)(4). The requirements of 40 CFR 76.11(a)(4) require that each unit in an averaging plan whose alternative contemporaneous annual emission limitation is more stringent than that unit's applicable emission limitation under § 76.4, 76.6, or 76.7, shall have a minimum allowable annual heat input value (mmBtu).

II General Comments

1. General Comment - Please note that our opportunity for review and comment on this permit does not prevent EPA from taking enforcement action for issues that have not been raised in these comments. After final issuance, this permit shall be reopened if EPA or the permitting authority determines that it must be revised or revoked to assure compliance with applicable requirements.

2. Section III, Subsection A, Condition A.1.b and G.6: The Department should consider deleting everything except the first sentence of these conditions since such information is also contained in condition N.4.

3. Section III, A.18, A.26, B.12(3), B.13, B.15, B.20, B.25(1), B.26, B.29, B.33, B.34, B.35, B.38, D.5, D.11, G.5, L.6, L.8, M.5: These conditions refer to "specific condition XX," which is the terminology used in the Department's

construction permits. In order to have consistency throughout the permit, the Department should replace “specific condition” with just “condition” and include the appropriate condition numbers, where applicable.

4. Section III, Condition B.9: Please add 40 C.F.R. 60.46a(c) to the regulatory citations for this condition.

5. Section III, Condition B.39: Since this condition specifies the submission of reports to the Department, the appropriate address where the reports should be sent should be included in Section II of the permit.

6. Section III, Condition B.42: Please correct the reference for the “representative actual emissions to read **40 CFR 52.21(b)(33)**.

7. Section III, Condition C.4: The Department needs to clarify whether the notification is via phone or letter.

8. Section III, Condition H.2: The regulatory citation for this condition has the phrase “permitting note” in it. Please verify whether a permitting note should have been included in this condition.

9. Section III, Condition I.5: This condition refers to the limits contained in condition I.4. Please verify whether this condition should reference conditions I.2 and I.6 instead. Also, please verify whether the condition referred to in condition I.6(c) is the correct one.

10. Section III, Condition L.4: Please correct the note to identify 40 C.F.R. 60.672(a)(1) and (2) as basis for the limits in this condition. Also, the Department should consider streamlining condition L.8 into condition L.4.

11. Periodic Monitoring: As you are aware, on April 14, 2000, the U.S. Court of Appeals for the D.C. Circuit issued an opinion addressing industry's challenge to the validity of portions of EPA's periodic monitoring guidance. See, Appalachian Power Co. v. EPA, No. 98-1512 (D.C. Cir., April 14, 2000). The Court found that "State permitting authorities [ ] may not, on the basis of EPA's guidance or 40 C.F.R. 70.6(a)(3)(i)(B), require in permits that the regulated source conducts more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test." While the permit contains testing from “time to time,” as discussed in the court opinion, EPA does not consider these conditions sufficient to ensure compliance. In light of the court case, EPA is withholding formal objection regarding the adequacy of the periodic monitoring included in the permit for the following pollutants: Particulate Matter (PM),

Visible Emissions (VE) and Sulfur Dioxide (SO_2). EPA's concerns are outlined below:

The permit does not contain adequate periodic monitoring for PM (conditions A.12, D.6, L.5 and M.3) and VE (conditions A.12, C.6, D.6, L.5 and M.4) Although the permit requires annual testing for these pollutants, this infrequent testing is not sufficient to provide a reasonable assurance of compliance with emission limits. All Title V permits must contain monitoring that is sufficient to assure compliance with the applicable permit requirements. In particular, 40 C.F.R. Part 70.6 (a)(3)(B) requires that permits include periodic monitoring that is sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable emission limits. In addition to assuring compliance, a system of periodic monitoring will also provide the source with an indication of their emission unit's performance, so that periods of excess emissions and violations of the emission limits can be minimized or avoided. Therefore, the permit should include a periodic monitoring scheme that will provide data which is representative of the source's actual performance.

Since some of the emission units are equipped with control devices, the best approach to address the periodic monitoring requirements for these units is to utilize parametric monitoring of the control equipment. In order to do this, a correlation needs to be developed between the control equipment parameter(s) to be monitored and the pollutant emission levels. The source needs to provide an adequate demonstration (historical data, performance test, etc.) to support the approach used. In addition, an acceptable performance range for each parameter that is to be monitored should be established. The range, or the procedure used to establish the parametric ranges that are representative of proper operation of the control equipment, and the frequency for re-evaluating the range should be specified in the permit. Also, the permit should include a condition requiring a performance test to be conducted if an emission unit operates outside of the acceptable range for a specified percentage of the normal operating time. The Department should set the appropriate percentage of the operating time that would serve as trigger for this testing requirement.

As an alternative to the approaches described above, a technical demonstration can be included in the statement of basis explaining why the State has chosen not to require any additional testing to assure compliance with the PM and VE emission limitations for these units. The demonstration needs to identify the rationale for basing the compliance certification on data from a short-term test performed once a year.

12. Placard Page - Acid Rain: The "Referenced Attachments Made Part of This Permit " should include the Phase II Acid Rain Part application referred to in

Section IV of the permit. EPA Region 4 requested a copy of the Phase II Acid Rain Part application for this source in order to assist us in our review of the proposed permit for the Big Bend Station. However, it is unclear whether the application that we received (signed on December 19, 1995) is the same application referenced in Section IV of the proposed permit. The application referenced in Section IV was received by DEP on June 14, 1996. Please clarify if the application that we received by fax is indeed the application that was received by your office on June 14, 1996 and is to be considered part of the title V permit for the Big Bend Station.